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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,096	03/13/2001	Gijsbert Joseph Van Den Enden	PHN 17,551	1082

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
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BRIARCLIFF MANOR, NY 10510

EXAMINER

AGUSTIN, PETER VINCENT

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/787,096

Applicant(s)

VAN DEN ENDEN, GIJSBERT  
JOSEPH

Examiner

Peter Vincent Agustin

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 April 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 1-23 are now pending.
2. The indicated allowability of claims 9-12 is withdrawn in view of the English translation of the Tsuchiya et al. (JP 01253638) reference. Rejections based on the newly cited reference(s) follow.

#### ***Continued Examination Under 37 CFR 1.114***

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 26, 2005 has been entered.

#### ***Claim Objections***

4. Claims 1, 5, 6, 9, 11, 13, 18, 20, 21 & 23 are objected to because of the following informalities:

Claim 1, line 3: "the resulting" should be --a resulting--.

Claim 5, line 1: "the-record" should be --the record--.

Claim 5, line 2: "(1)" should be deleted.

Claim 5, line 2: "comprising" should be --further comprising--.

Claim 6, line 1: "Claimed" should be --claimed--.

Claim 9, line 2: "(1)" should be deleted.

Claim 9, line 2: "comprising" should be --the method further comprising--.

Claim 11, line 6: "n" should be --in--.

Art Unit: 2652

Claim 13, line 1: "(1)" should be deleted.

Claim 13, line 4: "the resulting" should be --a resulting--.

Claim 18, lines 4-5: the recitation "a level of a preselected fraction of said maximum value is chosen as the predetermined signal threshold is equal to approximately 0.5" is grammatically incorrect and needs to be rephrased.

Claim 20, line 1: "Claimed" should be --claimed--.

Claim 21, lines 4-5: "signal threshold" should be --the predetermined signal threshold--.

Claim 23, line 6: "it" should be deleted.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 5, 6, 9, 10 & 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsuchiya et al. (JP 01253638) (please refer to English translation).

In regard to claim 1, Tsuchiya et al. disclose a method of examining a record carrier for the presence of a defect (see title) comprising following a track to be examined and monitoring the resulting tracking signal (page 7, last paragraph); and rating the examined recording track for the presence of media defects on the basis of characteristics of the resulting tracking signal (page 8, first paragraph).

In regard to claim 2, Tsuchiya et al. disclose that the examined recording track is rated as being defective if the absolute value of the tracking signal has a value which exceeds a predetermined signal threshold for a predetermined period of time or longer (see Figure 3 in conjunction with page 4, paragraph 2, line 14: "tracking error signal" and page 5, paragraph 2, line 6: "pulse width").

In regard to claim 3, Tsuchiya et al. disclose that the tracking signal has a nominal signal value of zero which corresponds to the center of a track (note: the "tracking error signal" is zero in an on-track condition), and has a maximum value which corresponds to a maximum lateral deviation with respect to the center of a track (note: the claimed "maximum lateral deviation" simply corresponds to an arbitrary offset position of the optical head of Tsuchiya et al. that causes a maximum "tracking error signal"), and wherein a level of a preselected fraction of said maximum value is chosen as the predetermined signal threshold (the "threshold value" in Figure 3 is clearly a "preselected fraction").

In regard to claim 5, Tsuchiya et al. disclose that the record carrier is examined for the presence of spot defects (see Figure 3), the method comprising: a) examining the integrity of predetermined test tracks of the record carrier (see page 6, last paragraph, line 3: "increment of a track block with a certain interval"); b) examining the integrity of tracks adjacent the relevant test track each time that upon the examination a test track appears to be defective, in order to determine in this way the number of tracks affected by the same spot defect (see page 7, first paragraph, line 2: "one or more multiple tracks each anterior & posterior to the detected defective portions"); c) entering the relevant tracks in a defect list each time that the number thus

Art Unit: 2652

determined in the step (b) is greater than a predetermined threshold value (see page 8, paragraph 1, last four lines); d) storing the defect list in a memory (see page 8, paragraph 1, last line).

In regard to claim 6, Tsuchiya et al. disclose that a predetermined number of tracks between successive test tracks is skipped (see patent claim 1, line 3: "jump scan" and lines 4-5: "an increment of a certain track number each").

In regard to claim 9, Tsuchiya et al. disclose that the record carrier is examined for the presence of spot defects (see Figure 3), the method further comprising: a) examining the integrity of predetermined test tracks of the record carrier (see page 6, last paragraph, line 3: "increment of a track block with a certain interval"); b) entering the relevant tracks in a primary defect list each time that upon the examination of a test track it appears to be defective, and entering tracks situated in a suspect area at opposite sides of the relevant test track in an alarm list (see page 7, first paragraph, line 2: "one or more multiple tracks each anterior & posterior to the detected defective portions"); c) storing the primary defect list and the alarm list in a memory (see page 8, paragraph 1, last four lines).

In regard to claim 10, Tsuchiya et al. disclose that a predetermined number of tracks between successive test tracks is skipped (see patent claim 1, line 3: "jump scan" and lines 4-5: "an increment of a certain track number each"), and wherein each suspect area always extends from the relevant test track to the directly preceding and the directly following test track, respectively (note "anterior & posterior to the detected defective portions" in page 7, line 2).

In regard to claim 23, Tsuchiya et al. disclose a method of examining a record carrier for the presence of a defect (see title) comprising: monitoring a track to be examined and generating a tracking signal from the track that is monitored (page 7, last paragraph); rating the track for the

presence of spot defects based on characteristics of the tracking signal (page 8, first paragraph); entering the track into a defect list if the track appears to be defective (see page 8, paragraph 1, last four lines); and creating a suspect area list for other tracks at opposite sides of the track if the track appears to be defective (see page 8, paragraph 1, last four lines in conjunction with page 7, line 2: "anterior & posterior to the detected defective portions").

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4 & 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya et al.

For a description of Tsuchiya et al., see the rejection above. Furthermore, Tsuchiya et al. disclose: in regard to claim 18, that the tracking signal has a nominal signal value of zero which corresponds to the center of a track (note: the "tracking error signal" is zero in an on-track condition), and has a maximum value which corresponds to a maximum lateral deviation with respect to the center of a track (note: the claimed "maximum lateral deviation" simply corresponds to an arbitrary offset position of the optical head of Tsuchiya et al. that causes a maximum "tracking error signal"), and wherein a level of a preselected fraction of said maximum value is chosen as the predetermined signal threshold (the "threshold value" in Figure 3 is clearly a "preselected fraction"). However, Tsuchiya et al. do not explicitly disclose: in regard to claim 4, that said predetermined period of time lies in a range from approximately 50

Art Unit: 2652

$\mu\text{s}$  to approximately 75  $\mu\text{s}$ ; in regard to claim 18, that the preselected fraction is equal to approximately 0.5; in regard to claim 19, that said predetermined period of time is approximately 60  $\mu\text{s}$ ; and in regard to claim 20, that approximately 50 tracks between successive test tracks are skipped.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention by the Applicant to have selected a predetermined period of time ranging from approximately 50  $\mu\text{s}$  to approximately 75  $\mu\text{s}$ , a preselected fraction equal to approximately 0.5, and a predetermined period of time approximately 60  $\mu\text{s}$ , and to have skipped approximately 50 tracks between successive test tracks, because selecting these ranges/values would have been an obvious matter of design choice.

9. Claims 7, 8, 11 & 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya et al. in view of Fukushima et al. (US 5,237,553).

For a description of Tsuchiya et al., see the rejection above. Furthermore, Tsuchiya et al. disclose: in regard to claims 8 & 11, a record carrier (shown in Figure 4) of the type having a multitude of concentric substantially circular recording tracks (also note title: "disc-shaped"); and first providing, in an examination phase, a defect list of tracks affected by a comparatively large spot defect (page 10, paragraph 4, line 11: "grave defects") by means of a method as claimed in Claim 6 (as noted in the rejection above); and in regard to claim 11, first providing, in a primary examination phase, a primary defect list of test tracks having a defect (page 10, paragraph 4, lines 3-4: "a cluster of tracks of a certain interval on the disc-shaped optical recording medium is initially subjected to inspection") and, optionally, an alarm list of tracks situated in a suspect area at opposite sides of the relevant test tracks (page 10, paragraph 4, lines



Art Unit: 2652

10-11: "tracks anterior & posterior to said defective portion"), by means of a method as claimed in Claim 10 (as noted in the rejection above); subsequently examining the integrity of the tracks in said suspect areas in a secondary examination phase (page 10, paragraph 4, line 11: "re-inspection"), in order to determine in this way the number of tracks affected by the same spot defect; entering the relevant tracks in a secondary defect list each time that the number thus determined is greater than a predetermined threshold value (see page 8, paragraph 1, last four lines).

However, Tsuchiya et al. do not disclose: in regard to claim 7, that the defect list is recorded on the examined record carrier; in regard to claim 8, a method of recording information comprising subsequently recording information on the disc in a recording phase while reference is made to said defect list, the recording tracks included in said defect list being skipped in the recording process; in regard to claim 11, a method of recording information comprising subsequently recording information on the disc in a recording phase while reference is made to said primary defect list and said optional alarm list, the recording tracks included in said primary defect list as well as the tracks situated in a suspect area at opposite sides of the relevant test tracks being skipped in the recording process; and in regard to claim 12, that the secondary defect list is recorded on the examined record carrier.

Fukushima et al. disclose a defect list recorded on a record carrier (see R LIST AREA in Figure 2) and a method of recording information comprising subsequently recording information on the disc in a recording phase while reference is made to said defect list, the recording tracks included in said defect list being skipped in the recording process (column 9, lines 57-63). It would have been obvious to one of ordinary skill in the art at the time of the invention by the

Art Unit: 2652

Applicant to have applied the teachings of Fukushima et al. to the method of Tsuchiya et al., the motivation being to enable defect management and sequential reproduction of real time data (column 2, lines 56-61).

10. Claims 13-17, 21 & 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya et al. in view of Takasago et al. (US 4,730,290).

In regard to claim 13, Tsuchiya et al. disclose a method of recording information on a record carrier, comprising: monitoring a recording track to provide a rating of defects contained on the track (see page 7, last paragraph thru page 8, first paragraph). However, Tsuchiya et al. do not explicitly disclose: in regard to claim 13, based on the resulting tracking signal determining whether the recording process is to be continued or discontinued; and in regard to claim 14, that the recording process is discontinued if the absolute value of the tracking signal appears to have a value which exceeds a predetermined signal threshold for a predetermined period of time or longer.

Takasago et al. disclose determining whether a recording process is to be continued or discontinued based on a resulting tracking signal (column 7, lines 6-11); and the recording process is discontinued if the absolute value of the tracking signal appears to have a value which exceeds a predetermined signal threshold for a predetermined period of time or longer (see abstract, lines 4-13). It would have been obvious to one of ordinary skill in the art at the time of the invention by the Applicant to have applied the teachings of Takasago et al. to the method of Tsuchiya et al., the motivation being to prevent erroneous recording (column 7, line 11).

In regard to claim 15, Tsuchiya et al. disclose that the tracking signal has a nominal signal value of zero which corresponds to the center of a track (note: the "tracking error signal"

Art Unit: 2652

is zero in an on-track condition), and has a maximum value which corresponds to a maximum lateral deviation with respect to the center of a track (note: the claimed "maximum lateral deviation" simply corresponds to an arbitrary offset position of the optical head of Tsuchiya et al. that causes a maximum "tracking error signal"), and wherein a level of a preselected fraction of said maximum value is adopted as the predetermined signal threshold (the "threshold value" in Figure 3 is clearly a "preselected fraction").

Furthermore, Tsuchiya et al. disclose: in regard to claim 21, that the tracking signal has a nominal signal value of zero which corresponds to the center of a track (note: the "tracking error signal" is zero in an on-track condition), and has a maximum value which corresponds to a maximum lateral deviation with respect to the center of a track (note: the claimed "maximum lateral deviation" simply corresponds to an arbitrary offset position of the optical head of Tsuchiya et al. that causes a maximum "tracking error signal"), and wherein a level of a preselected fraction of said maximum value is adopted as signal threshold (the "threshold value" in Figure 3 is clearly a "preselected fraction"). However, Tsuchiya et al. in view of Takasago et al. do not disclose: in regard to claim 16, that said predetermined period of time lies in a range from approximately 50  $\mu$ s to approximately 75  $\mu$ s; in regard to claim 21, that the preselected fraction is approximately 2/3; and in regard to claim 22, that said predetermined period of time is approximately 60  $\mu$ s.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention by the Applicant to have selected a predetermined period of time ranging from approximately 50  $\mu$ s to approximately 75  $\mu$ s, a preselected fraction approximately 2/3, and a

Art Unit: 2652

predetermined period of time approximately 60  $\mu$ s, because selecting these ranges/values would have been an obvious matter of design choice.

In regard to claim 17, Tsuchiya et al. in view of Takasago et al. disclose the method as claimed in Claim 16 (as noted above). Furthermore, Tsuchiya et al. discloses a record carrier (see Figure 4) of the type comprising a multitude of concentric substantially circular recording tracks, particularly an optical disc. However, in regard to claim 17, Tsuchiya et al. do not disclose a recording device suitable for the recording of information, particularly real time video or audio, which recording device comprises: a control unit; a write/read unit adapted to aim a laser beam at a track of a record carrier under control of the control unit and to receive laser light reflected from the disc, and further adapted to supply a tracking signal to the control unit, which tracking signal has been determined on the basis of the reflected laser light; wherein the control unit is adapted to carry out the method as claimed in Claim 16.

Takasago et al. disclose a recording device (Figure 1) suitable for the recording of information, particularly real time video or audio, on a record carrier (1) of the type comprising a multitude of concentric substantially circular recording tracks, particularly an optical disc, which recording device comprises: a control unit (30); a write/read unit (4) adapted to aim a laser beam at a track of a record carrier under control of the control unit and to receive laser light reflected from the disc, and further adapted to supply a tracking signal (output of element 7) to the control unit, which tracking signal has been determined on the basis of the reflected laser light. It would have been obvious to one of ordinary skill in the art at the time of the invention by the Applicant to have used the recording device of Takasago et al. for the method of Tsuchiya et al., the motivation being to provide an optical recording/reproducing apparatus which can normally

reproduce data from an optical disc independently of the difference in characteristics among optical disc apparatuses used, and which is applicable to various types of optical discs (column 2, lines 22-27).

*Response to Arguments*

11. Applicant's arguments regarding the Takasago et al. reference have been considered but are moot in view of the new ground(s) of rejection.

12. Applicant's arguments regarding the Tsuchiya et al. reference have been fully considered but they are not persuasive.

a. The Applicant argues on page 23, last three lines that “there is no disclosure or suggestion within Tsuchiya et al. for c) entering the relevant tracks to any defect list each time that the number thus determined in step (b) is greater than a predetermined threshold value”. The Examiner disagrees. Tsuchiya et al. teach on page 7, paragraph 2 “positional information prevailing at the time of the generation of a defect(s) is detected by designating the threshold value specific to the magnitudes of grave defects...” and on page 8, paragraph 1, last four lines “a defect information recording unit designed to accumulate the sets of error generation positional information within the playback signal (RF), tracking error signal (TE), & focus error signal (FE) obtained by the defect positional /4 information detection unit (27), and it is constituted by a memory”, i.e., the claimed step c). The Applicant further argues on page 24, paragraph 1 that “there is no suggestion or disclosure within Tsuchiya et al. for providing a threshold value to determine the number of tracks that are affected by the same spot defect and only recording those defects that are at least as large as the threshold”. The Examiner

disagrees. Tsuchiya et al. teach on page 8, lines 4-8 “(26) is a defect detection unit designed, in a case where anomalous signals (errors) equal to or higher than certain threshold values have arisen...to output detection pulses the widths of which are proportional to the size(s) of said detect(s)”, i.e., a threshold value to determine the number of tracks that are affected by the same spot defect and only recording those defects that are at least as large as the threshold.

b. The Applicant argues on page 24, paragraph 2 that “there is no disclosure or suggestion within Tsuchiya et al. for skipping a predetermined number of tracks between successive test tracks”. The Examiner disagrees. Patent claim 1 of Tsuchiya et al. recite “jump scan” and “executed by an increment of a certain track number each” on lines 3-5, i.e., a predetermined number of tracks between successive test tracks is skipped.

### *Conclusion*

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Vincent Agustin whose telephone number is 571-272-7567. The examiner can normally be reached on Monday-Friday 9:30-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Thi Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2652

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Vincent Agustin  
Art Unit 2652

A handwritten signature in black ink, appearing to read "B. Miller", written over a horizontal line.

BRIAN C. MILLER  
PATENT ATTORNEY